We claim:

5

15

- 1. A transposon nucleic acid comprising a genetically engineered translation stop signal in three reading frames at least partly within a transposon end sequence recognised by a transposase.
- 2. The transposon nucleic acid according to claim 1, wherein said transposon contains a selectable marker and/or a reporter gene.
- 3. The transposon nucleic acid according to claim 1 or 2, wherein said transposon end sequence is Mu or Tn7 end sequence.
  - 4. The transposon nucleic acid according to any one of claims 1-3, wherein said transposon end sequence is a transposon end binding sequence.
  - 5. The transposon nucleic acid according to claim 3, wherein Mu end sequence is Mu R-end binding sequence.
- 6. The transposon nucleic acid according to claim 5, wherein said transposon sequence is set forth in SEQ ID NO:1, SEQ ID NO:2 or SEQ ID NO:5.
  - 7. The transposon nucleic acid according to claim 3, wherein said transposon sequence is set forth in SEQ ID NO:7.
- 8. The transposon nucleic acid according to any one of the preceding claim, wherein said transposon further contains a genetically engineered restriction enzyme site.
  - 9. Method of producing a deletion derivative of a polypeptide coding nucleic acid comprising the steps of:
- (a) performing a transposition reaction in the presence of a target nucleic acid containing a polypeptide coding nucleic acid of interest and in the presence of a transposon containing a genetically engineered translation stop signal sequence in three reading frames at least partly within a transposon end sequence recognised by a

WO 03/087370 PCT/FI03/00285

transposase, (b) recovering a target nucleic acid having said transposon incorporated in said protein coding nucleic acid.

- 10. The method according to claim 9 further comprising a step of (c) expressing said
  protein coding nucleic acid having said transposon incorporated.
  - 11. The method according to claim 9 or 10, wherein said transposon comprises the transposon nucleic acid of any one of claims 2-8.
- 12. A kit for producing deletion derivatives of polypeptide coding nucleic acids comprising the transposon nucleic acid of any one of claims 1-8.

15

13. Use of the transposon nucleic acid of any one of claims 1-8 for producing deletion derivatives of polypeptide coding nucleic acids.